

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

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UNITED STATES OF AMERICA,

Plaintiff,

v.

No. CR 10-2085 WJ

PAUL REYES SEDILLO,

Defendant.

**MEMORANDUM OPINION AND ORDER**

THIS MATTER comes before the Court following a hearing on Defendant's Motion for Hearing on Proposed Expert Opinion (Doc. 68). An evidentiary hearing was held on this motion on January 13, 2011 and continued on January 19, 2011. Having considered the parties' written and oral arguments and the applicable law, the Court finds that the proposed expert testimony is reliable and relevant.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993), the United States Supreme Court explained that Federal Rule of Evidence 702 assigns to the district judge a gatekeeping role to ensure that scientific testimony is both reliable and relevant. See *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1221 (10th Cir. 2003) (trial judge must determine whether the testimony has a reliable basis in the knowledge and experience of the relevant discipline).

The gatekeeping function involves a two-step analysis. First, the Court must determine whether the expert is qualified by "knowledge, skill, experience, training or education" to render an opinion. See Fed. R. Evid. 702. Second, if the witness is so qualified, the Court must

determine whether the expert's opinions are "reliable" under the principles set forth in *Daubert*, 509 U.S. 579, and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). See *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965 (10th Cir. 2001).

To assist in the assessment of reliability, the Supreme Court in *Daubert* listed four nonexclusive factors that the trial court may consider: (1) whether the opinion at issue is susceptible to testing and has been subjected to such testing; (2) whether the opinion has been subjected to peer review; (3) whether there is a known or potential rate of error associated with the methodology used and whether there are standards controlling the technique's operation; and (4) whether the theory has been accepted in the scientific community. 509 U.S. at 593-94.

This list is not exclusive, and district courts applying *Daubert* have broad discretion to consider a variety of other factors. *Kumho Tire*, 526 U.S. at 150; *Dodge*, 328 F.2d at 1222. In *Kumho Tire*, the United States Supreme Court emphasized that *Daubert* factors are not a "definitive checklist or test" and that a court's inquiry into reliability must be "tied to the facts of a particular case." 526 U.S. at 150. Also, according to the *Kumho Tire* decision, "the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Id.* at 152.

## I. Qualifications

After hearing Dr. Spence's testimony regarding his education and experience, the Court is satisfied that he is qualified under *Daubert* to offer an opinion on forensic DNA evidence. His background includes experience working in forensics both in the field and in academics. Furthermore, his experience includes both work done for defense and for prosecution. The Court finds that Dr. Spence is qualified to offer expert testimony on the theory of DNA transfer.

The government has not objected to this expert's qualifications.

## II. Reliability

Dr. Spence's theory that the defense intends to offer at trial is that an individual's DNA may be found on objects that the individual did not necessarily touch or come into direct contact with. This theory is called DNA transfer, and involves primary, secondary, tertiary, etc., levels of transfer. Primary DNA transfer is direct transfer of DNA from an individual to an object, for example, taking a swab of saliva from an individual's mouth. Secondary transfer involves another level of transfer and is more indirect, for example, when an individual touches a doorknob and that person's DNA transfers to the next person to touch that doorknob.

In this case, Dr. Spence is not offering a specific opinion as to whether Defendant's DNA transfer to the firearm took place on any particular level, or the likelihood that it was either primary, secondary, or so on. It is undisputed that Defendant's DNA is on the firearm. Rather, Dr. Spence is opining that the DNA sample could have ended up on the firearm other than by primary contact. Dr. Spence testified that the DNA testing does not reveal which level of transfer the DNA underwent. He considers any type of transfer in this case to be plausible.

Dr. Spence testified that DNA transfer has become more of a common concern in forensic analysis in the last ten to fifteen years because of the fact that DNA testing has become much more sensitive and sophisticated. Implications of the transfer theory even affect evidence collection because of concerns of cross-contamination. Dr. Spence stated that the theory is not new, but more and more frequently found in general textbooks and treatises on forensic science because of the developments in DNA testing. Dr. Spence also testified that extensive testing in the scientific community has supported his theory by tracking DNA transfers from individuals, objects, or other individuals. He also testified to personal experience in the laboratory and the control necessary to maintain the integrity of the results of DNA tests.

The government has objected to the expert's opinion that secondary transfer in this case could "easily" have happened. The government points to studies that show the transfer process is complicated and in some cases must be done deliberately. Based on these studies, they object to the expert's opinion that secondary transfer is "likely." The Court agrees. Without independent testing applicable to facts of this case, testimony as to the likelihood of secondary or tertiary transfer is speculative. A witness with Dr. Spence's qualifications may present testimony regarding this valid theory of DNA transfer. With respect to the DNA evidence, the Government's case is circumstantial and thus an opinion by Dr. Spence concerning the DNA transfer theory is relevant. However, opining as to the likelihood of it having happened in this particular case is grounded in speculation—especially since the shotgun in question was found in a closet, not sitting out where people may have passed by and thereby inadvertently transferred DNA.

The Court finds that this testimony satisfies the *Daubert* requirements for an expert opinion that is susceptible to testing, has been subjected to such testing, has undergone peer review, and has been accepted in the scientific community. To the extent that Dr. Spence intends to testify that the transfer is "likely" in this case, and to the extent that the word "easily" implies a particular level of likelihood, the government's objection is sustained.

### **III. Relevance**

The Court finds that evidence relating to DNA transfer will be assist the jury in its determination as to whether Defendant's DNA was on the gun because he possessed it, or for some other reason involving DNA transfer. Thus, this evidence goes directly to the charged offense, and will be helpful to the fact-finder. Further, the Court finds that the probative value of this testimony is not substantially outweighed by the danger of unfair prejudice.

In sum, the Court finds and concludes that Dr. Spence's testimony regarding DNA transfer will assist the factfinder and is not unduly prejudicial to Defendant. It is the jury's role to apply this theory to the evidence they will hear in this case and determine whether his testimony makes the government's theory of the case more or less probable regarding whether Defendant possessed the firearm.

**SO ORDERED.**



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UNITED STATES DISTRICT JUDGE